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Johannes, Joseph [NL/NL]; Grebbe 24, NL-7511 KV
Somerens (NL). **HURKMANS, Petrus, Lambertus,**
Wilhelmus [NL/NL]; Meidoornstraat 20, NL-5712 NR
Somerens (NL).

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(74) Agent: **BARTELDs, Erik**; Arnold & Siedsma, Sweet-
inckplein 1, NL-2517 GK Den Haag (NL).

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(71) Applicant (*for all designated States except US*): **AFA**
POLYTEK B.V. [NL/NL]; Grasbeemd 1, NL-5705 DE
Helmond (NL).

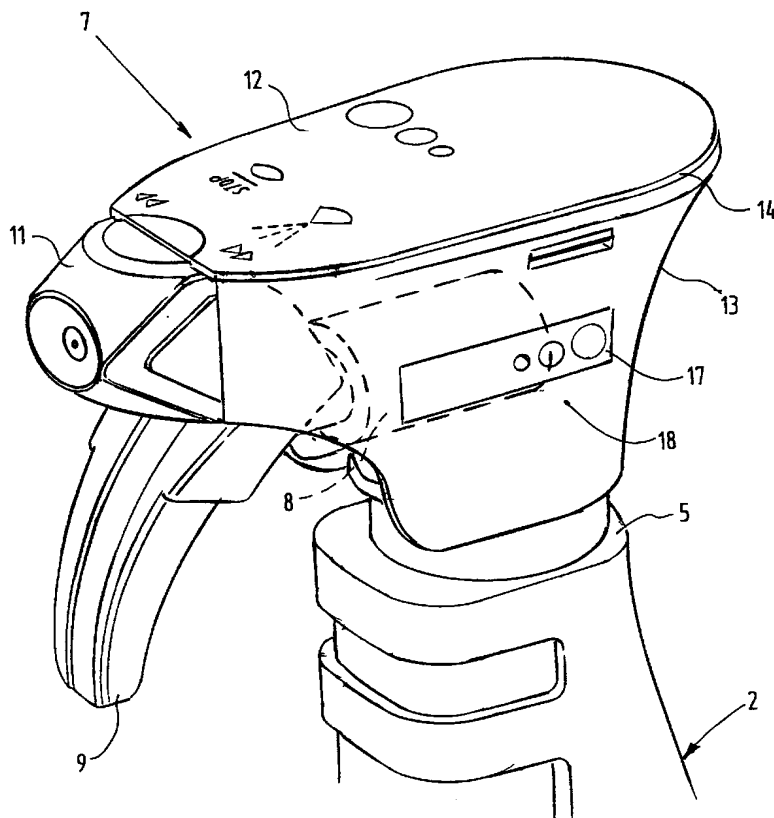
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(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **MAAS, Wilhelmus**,

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(54) Title: DISPENSER AND DISPENSING MECHANISM INCLUDING LABEL



(57) Abstract: The invention relates to a dispenser comprising a container (2) for holding a product to be dispensed and a dispensing mechanism (7) arranged on an outlet opening of the container. This dispensing mechanism carries at least one label displaying information (12), which is thus readily available to a potential purchaser or to a user. The information, which may relate to the product in the container and which may include operating instructions for the dispensing mechanism, may be arranged on a top surface of the dispensing mechanism. Additionally, a label showing information may also be arranged on a side of the dispensing mechanism. The information may be printed directly on the dispensing mechanism, but the label may also be a separate sticker that is affixed to the dispensing mechanism. The invention also relates to a dispensing mechanism for use in a dispenser as described above.

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IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

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DISPENSER AND DISPENSING MECHANISM INCLUDING LABEL

The present invention relates to a dispenser comprising a container for holding a product to be dispensed, said container having a bottom, a top and at least one side wall interconnecting said bottom and top, 5 said container further including at least one outlet opening arranged in or near said top, and a dispensing mechanism arranged on said at least one outlet opening. Such a dispenser is known, e.g. from applicant's co-pending international patent application WO 00/????? 10 (wordt pas volgende week bekend).

Prior art dispensers of the general type disclosed in the above-identified patent application typically include a bottle having a neck at the top, and a dispensing mechanism, for instance a trigger sprayer, 15 attached to the neck. The trigger sprayer may be attached to the bottle in any conventional way, e.g. by a threaded connection, a bayonet connection or a snap connection. Alternatively, part of the trigger sprayer may be integrated with the bottle in the way disclosed in the 20 above-referenced patent application.

Information relating to the product contained in the bottle and/or to the way the trigger sprayer can be operated is usually displayed on labels that are applied to the sides of the bottle. Therefore, to view 25 this information, a prospective purchaser and/or user of the dispenser must hold the bottle up so high that the information on the labels on the sides of the bottle is visible.

In addition, purchasers of this type of 30 dispensers usually store them in their homes in locations where they are easily accessed when needed. The dispensers are often stored in a cabinet beneath the sink of the home along with other cleaning and related household products that are contained in bottles or

dispensers, often bottles with trigger sprayers. When looking for a particular product contained in a bottle or dispenser that is stored beneath a household sink, the user is often required to pick up each of the bottles and
5 dispensers stored there to view the sides of the bottles and dispensers in order to determine their contents.

Incidentally, the same issue arises when bottles or dispensers are tightly packed in display racks in supermarkets, where a prospective purchaser will often
10 have to pick up a bottle or dispenser in order to verify if it is the particular brand for which he/she is looking.

The present invention has for its object to provide a dispenser of the type described above in which
15 the above discussed drawbacks associated with prior art dispensers are overcome. In accordance with the invention, this is achieved in such a dispenser in that the dispensing mechanism carries at least one label displaying information. With the information displayed on
20 the dispensing mechanism, which is arranged on top of the bottle, it is not necessary to hold the dispenser up high in order to view the information. In this connection, the term "label" is intended to denote any object that is suitable for displaying information.

25 In a preferred embodiment of the dispenser, the dispensing mechanism includes at least one top surface, the at least one label being arranged on the top surface. In this way the information may be viewed from any direction when looking down on the dispenser.
30 Furthermore, the information, which may include information on how to operate the dispensing mechanism, is then readily visible when the dispenser is held in the hand prior to its use.

Additionally or alternatively, the dispensing
35 mechanism may include at least one side surface with the at least one label being arranged on the side surface. In this way additional information, for instance identifying

the manufacturer of the product contained in the dispenser may be displayed.

When the at least one label is incorporated in the surface, the number of separate operations during manufacture of the dispenser may be limited. In that case, the information may be printed on the surface or may be applied thereto by in-mould labelling.

Alternatively, in order to provide a dispenser that may be used for dispensing various types and brands of products, the at least one label may be affixed to the surface. The at least one label may then comprise a sticker having a visible side displaying the information and a backing including an adhesive layer for affixing to the surface.

In order to improve the impact and visibility of the information, the at least one label preferably displays the information in at least two different colours.

The information may relate to the product to be dispensed and/or to the use of the dispensing mechanism.

The invention further relates to a dispensing mechanism for use in a dispenser as described above, carrying at least one label displaying information.

The invention will now be illustrated by way of three exemplary embodiments thereof, with reference being made to the annexed drawing, in which like parts are identified by the same reference numerals, and in which:

Fig. 1 is a front perspective view of a dispenser in accordance with a first embodiment of the present invention;

Fig. 2 is a top perspective view of the dispenser of Fig. 1;

Fig. 3 is an enlarged view of the dispensing mechanism of the dispenser of Figs. 1 and 2;

Figs. 4a-4c show partial views of the top surface of the dispensing mechanism of a dispenser according to a second embodiment of the invention,

displaying information on three operating conditions of the dispensing mechanism;

Figs. 5, 6 and 7 are pictorial views illustrating how the information is displayed during purchase, storage and use, respectively, of the dispenser of Figs. 1-3; and

Fig. 8 is view corresponding to that of Fig. 3 of a third embodiment of the dispenser.

Figures 1 and 2 show the dispenser 1 of the present invention comprising a container 2 filled with a product to be dispensed, in this case a liquid to be sprayed. The container 2, in this embodiment a bottle, includes a bottom 3, standing side walls 4 and a top 5 in the shape of a neck surrounding an outlet opening 6. A dispensing mechanism 7, in this embodiment a trigger sprayer, is attached to the neck 6. The trigger sprayer 7 may be screwed onto the neck 6, but may also be partially integrated with the neck in the way described in WO 00/?????. The trigger sprayer 7 includes a manually operated pump 8 that is operated by manipulation of a trigger 9, as is conventional. The pump 8 draws liquid from the container 2 through a dip tube 10. Continued reciprocation of the trigger 9 causes the pump 8 to dispense the liquid through a nozzle 11 of the trigger sprayer 7. In this embodiment, the nozzle 11 is of a type that is adjustable between a closed position and a dispensing position. The adjusting movement could be a rotational movement or a linear movement.

In accordance with the invention, a label 12 is provided on the trigger sprayer 7. This label 12 may contain information regarding the contents of the dispenser 1 and/or regarding the use of the trigger sprayer 7. In this embodiment, the trigger sprayer 7 includes a housing 13 having a generally flat, enlarged top surface 14 on which the label 12 is arranged. The flat top allows the label 12 to be easily read, while the enlarged surface area allows sufficient room for displaying all required information. In this embodiment,

part of the information on the label 12 is in the form of a particular trademark, whereas the remainder of the label 12 is reserved for information regarding the operation of the nozzle 11.

5 The label 12 may be a sticker having an adhesive layer that is stuck onto the trigger sprayer 7, but may also form part of the housing 13 of the sprayer 7. For instance, the information might be printed directly on the top surface 14, or might be arranged
10 thereon by in-mould labelling.

 In another embodiment as shown in Figures 4a to 4c, the nozzle 11 is adjustable between three positions, a closed position (Fig. 4a), a position for foaming (Fig. 4b) and a position for spraying (Fig. 4c). These
15 positions are illustrated on the label 12. In its closed position, the nozzle 11 prevents liquid from being discharged from the trigger sprayer 7. When moved to its foam position, the liquid discharged from the sprayer 7 on manipulation of the trigger 9 is dispensed as a foam.
20 Alternatively, when the nozzle 11 is moved to its spraying position, the liquid discharged from the sprayer 7 on manipulation of the trigger 9 is dispensed as a spray. It will be apparent that in other embodiments of the sprayer 7, also other spray patterns could be
25 provided.

 Figure 5 illustrates how the label 12 readily displays information regarding the contents of the dispenser 1 to a potential purchaser of the product held in the container 2. The purchaser need merely pick up the
30 dispenser 1 from a store shelf¹⁸ and view the information on the label 12 on the top surface 14 of the trigger sprayer 7. If the purchaser is looking for a particular sprayer that dispenses as a foam, as a spray and/or as a stream, that information is also readily available to the
35 purchaser from the label 12. Thus, it is no longer necessary for the purchaser to remove the dispenser 1 from the store shelf and hold it up high to view this

information on the side of the container 2, as was necessary with prior art dispensers.

The label 12 also readily displays the information regarding the content of a particular dispenser 1 when the dispenser 1 is stored among other similar products in e.g. a cupboard 15, as illustrated in Fig. 6. A user who is looking for a specific household product contained in the dispenser 1 including the label 12 according to the invention can easily distinguish this dispenser from other similar dispensers by viewing the label 12 provided on the top of the dispensing mechanism 7.

Fig. 7 illustrates how the label 12 readily provides information on the use of the dispensing mechanism 7 to a user holding the dispenser 1 in his or her hand 16. The user of the trigger sprayer, looking to adjust the nozzle 12 to a specific desired discharge position, is easily provided with instructions on the adjustment movements to be made to the nozzle 11 from the label 12 on the top surface 14 of the trigger sprayer 7. It is no longer necessary for the user to hold the dispenser 1 up high to observe sprayer operating instructions on the side of the bottle or to search for obscure nozzle adjustment information molded on the nozzle as in prior art dispensers.

In yet another embodiment of the invention as illustrated in Fig. 8, the trigger sprayer 7 includes further labels 17 arranged on the sides 18 of the housing 13. These additional labels 17 may display further information regarding the product in the dispenser 1, for instance a trade mark.

In this way, the dispenser of the present invention including a label or labels provides readily available information regarding the contents of the dispenser and/or the use of the dispensing mechanism to the potential purchaser and the user of the dispenser.

Although the invention has been illustrated above by way of some exemplary embodiments, it will be

apparent that it is not limited thereto. For instance, it is conceivable that instead of the trigger sprayer described here, the labelling according to the invention could also be applied to other dispensers. Furthermore, 5 the label(s) could include other information than that described above. Other forms of display could also be envisaged. The scope of the invention is therefore solely defined by the annexed claims.

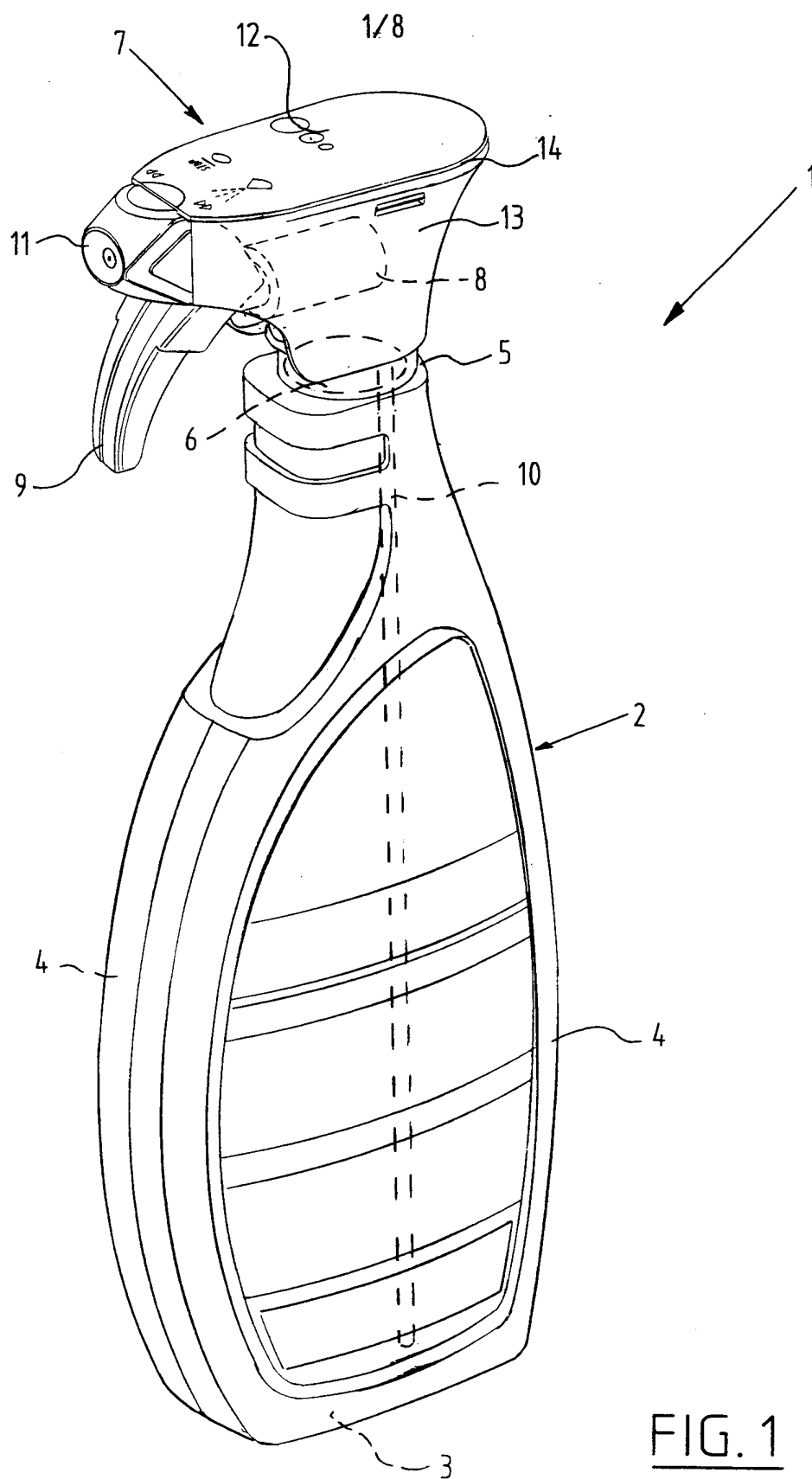
Claims

1. A dispenser comprising a container for holding a product to be dispensed, said container having a bottom, a top and at least one side wall interconnecting said bottom and top, said container
5 further including at least one outlet opening arranged in or near said top, and a dispensing mechanism arranged on said at least one outlet opening, **characterized in that** said dispensing mechanism carries at least one label displaying information.
- 10 2. The dispenser as claimed in claim 1, **characterized in that** said dispensing mechanism includes at least one top surface, said at least one label being arranged on said top surface.
- 15 3. The dispenser as claimed in claim 1 or 2, **characterized in that** said dispensing mechanism includes at least one side surface, said at least one label being arranged on said side surface.
- 20 4. The dispenser as claimed in claim 2 or 3, **characterized in that** said at least one label is incorporated in said surface.
5. The dispenser as claimed in claim 4, **characterized in that** said information is printed on said surface.
- 25 6. The dispenser as claimed in claim 4, **characterized in that** said information is applied to said surface by in-mould labelling.
- 30 7. The dispenser as claimed in claim 2 or 3, **characterized in that** said at least one label is affixed to said surface.
8. The dispenser as claimed in claim 7, **characterized in that** said at least one label comprises a sticker having a visible side displaying said information and a backing including an adhesive layer for affixing to said surface.
- 35 9. The dispenser as claimed in any one of the preceding claims, **characterized in that** said at least one

label displays said information in at least two different colours.

10. The dispenser as claimed in any one of the preceding claims, **characterized in that** said information
5 relates to said product to be dispensed and/or to the use of said dispensing mechanism.

11. Dispensing mechanism for use in a dispenser as claimed in any one of the preceding claims, carrying at least one label displaying information.



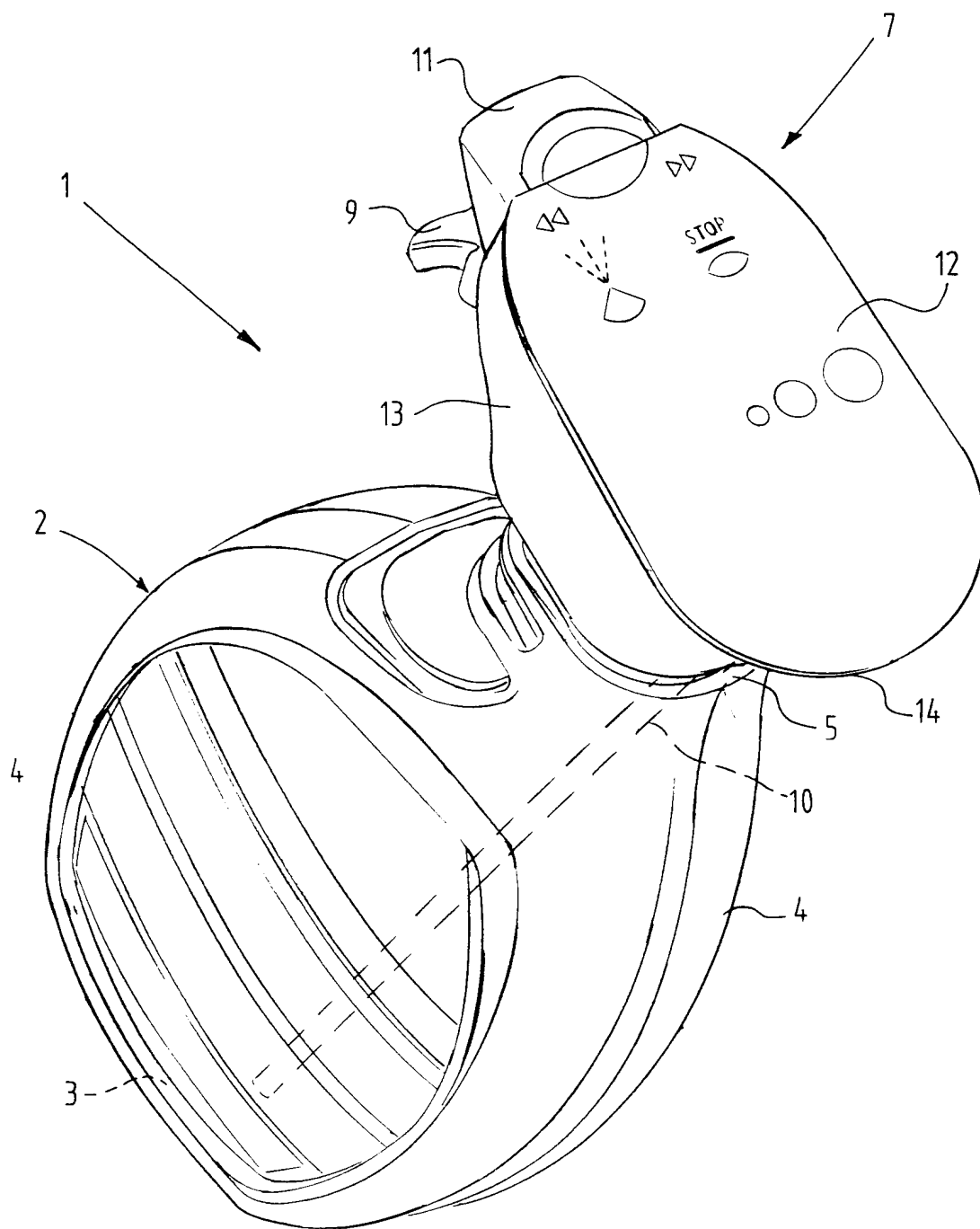


FIG. 2

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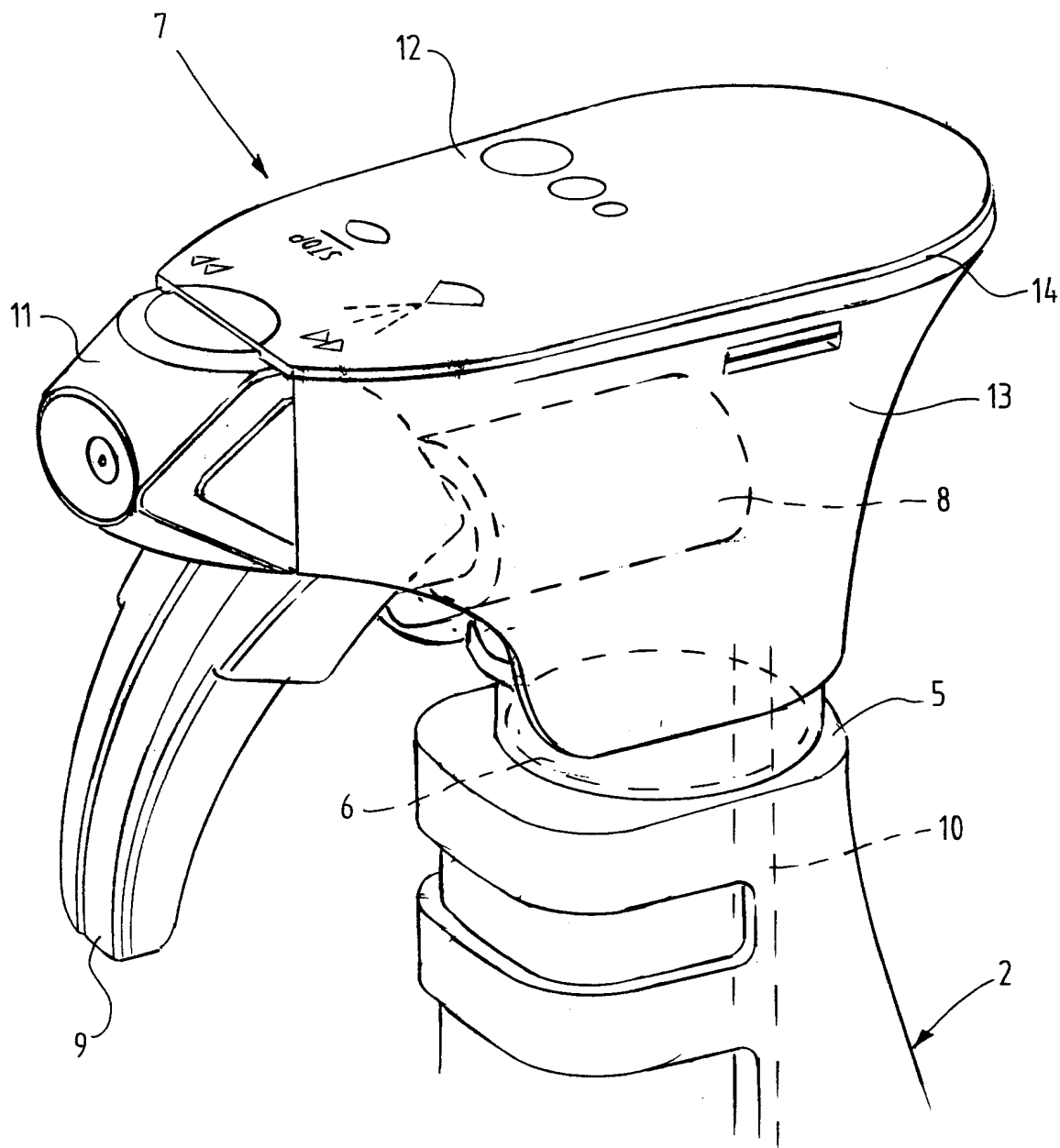


FIG. 3

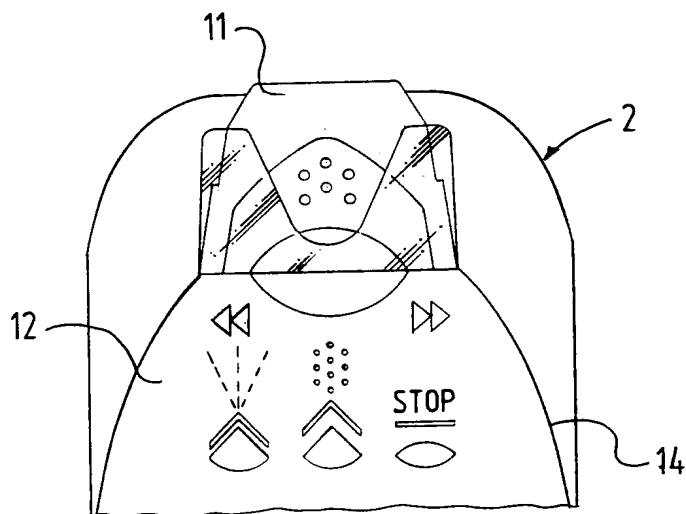
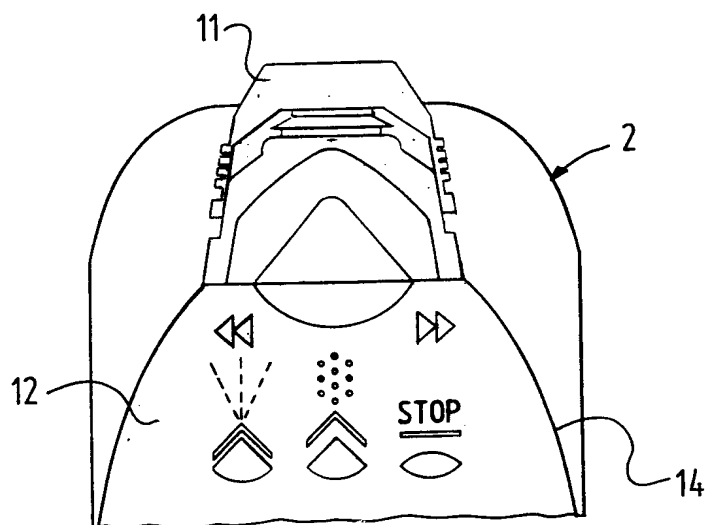
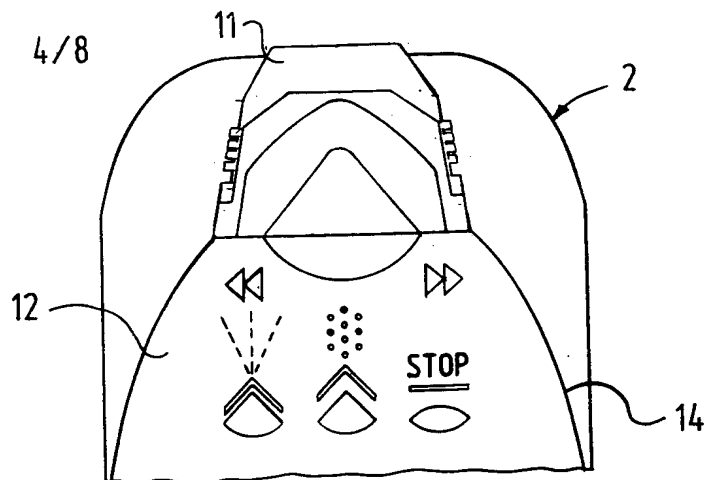
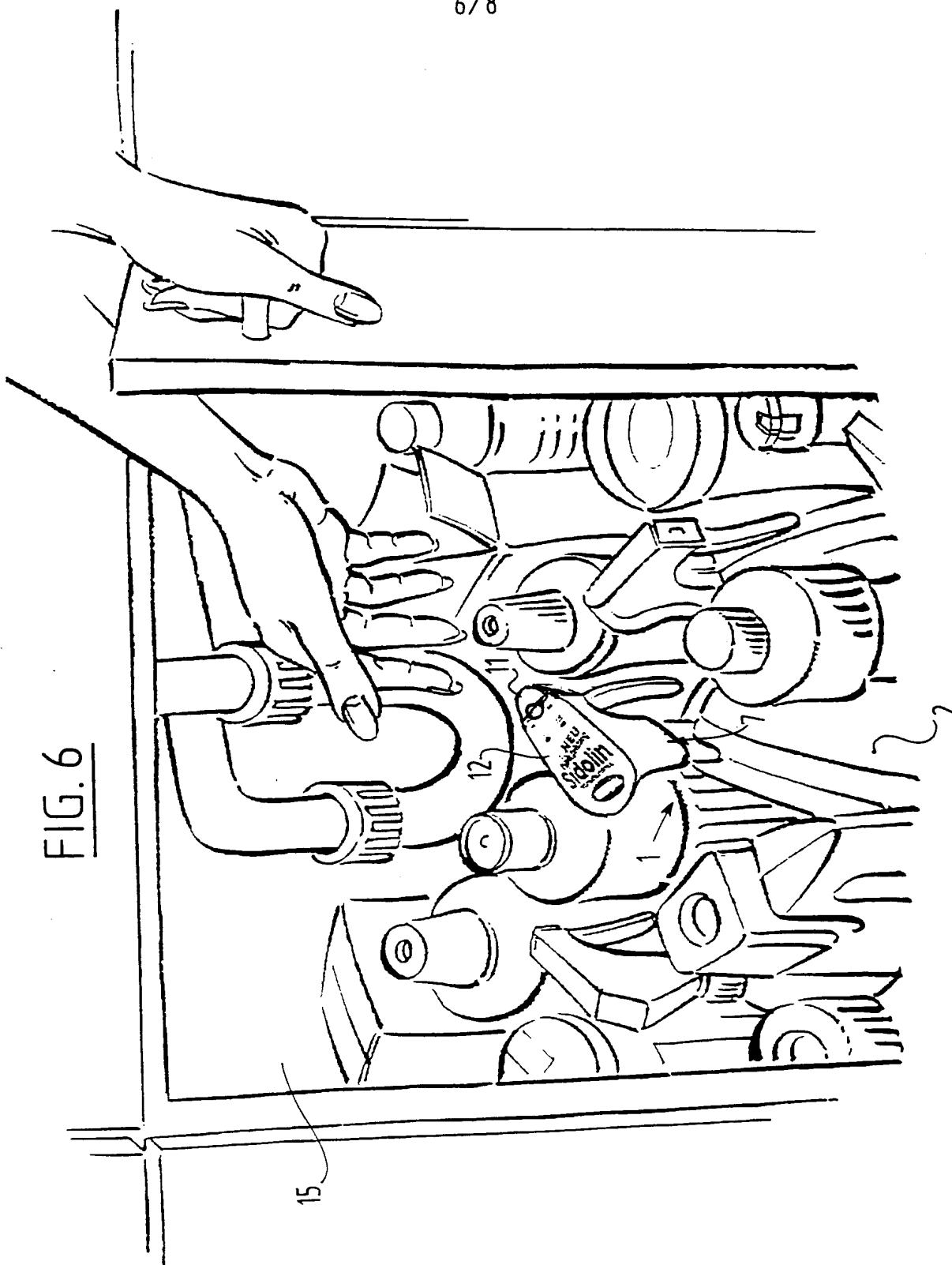


FIG. 5

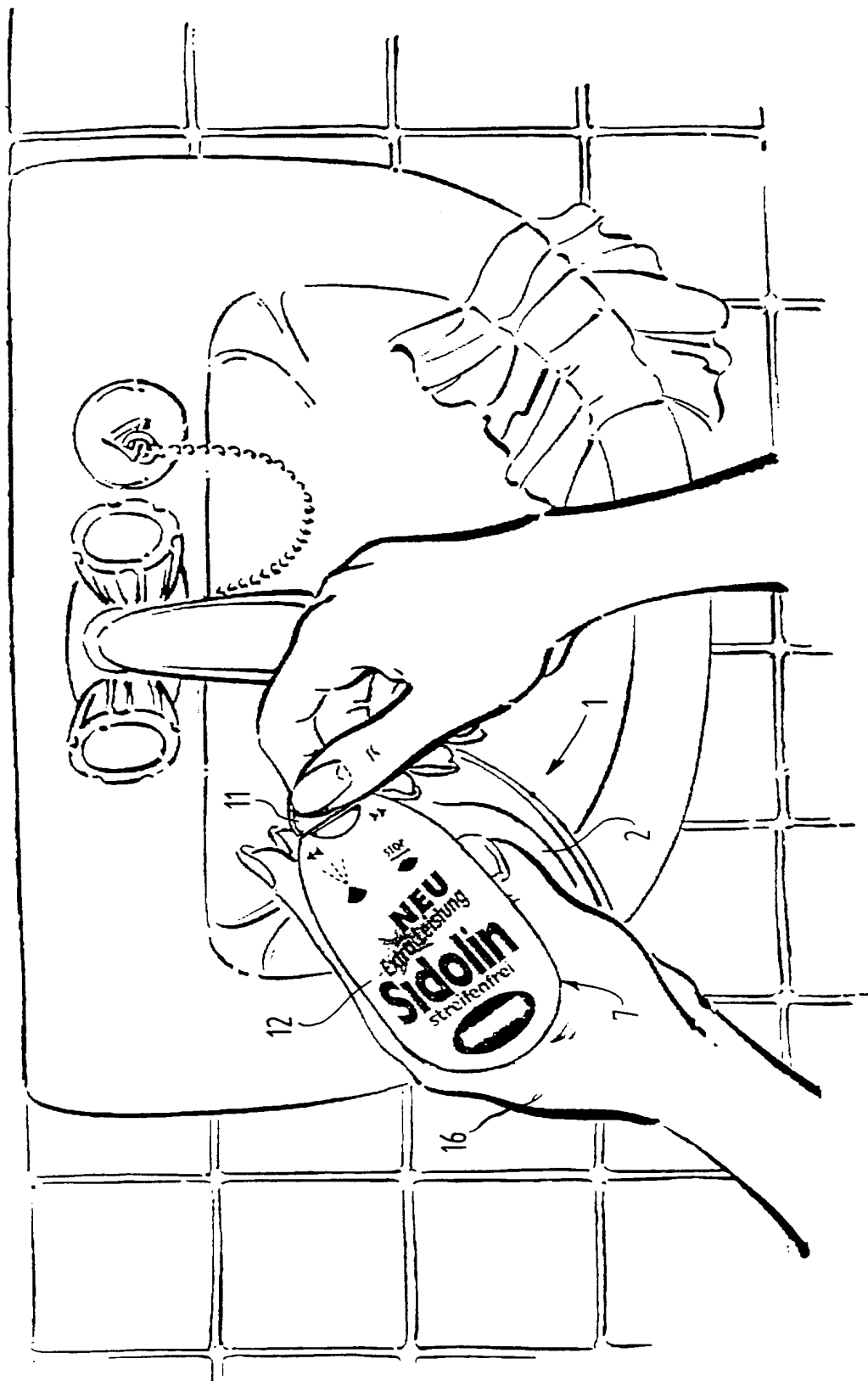


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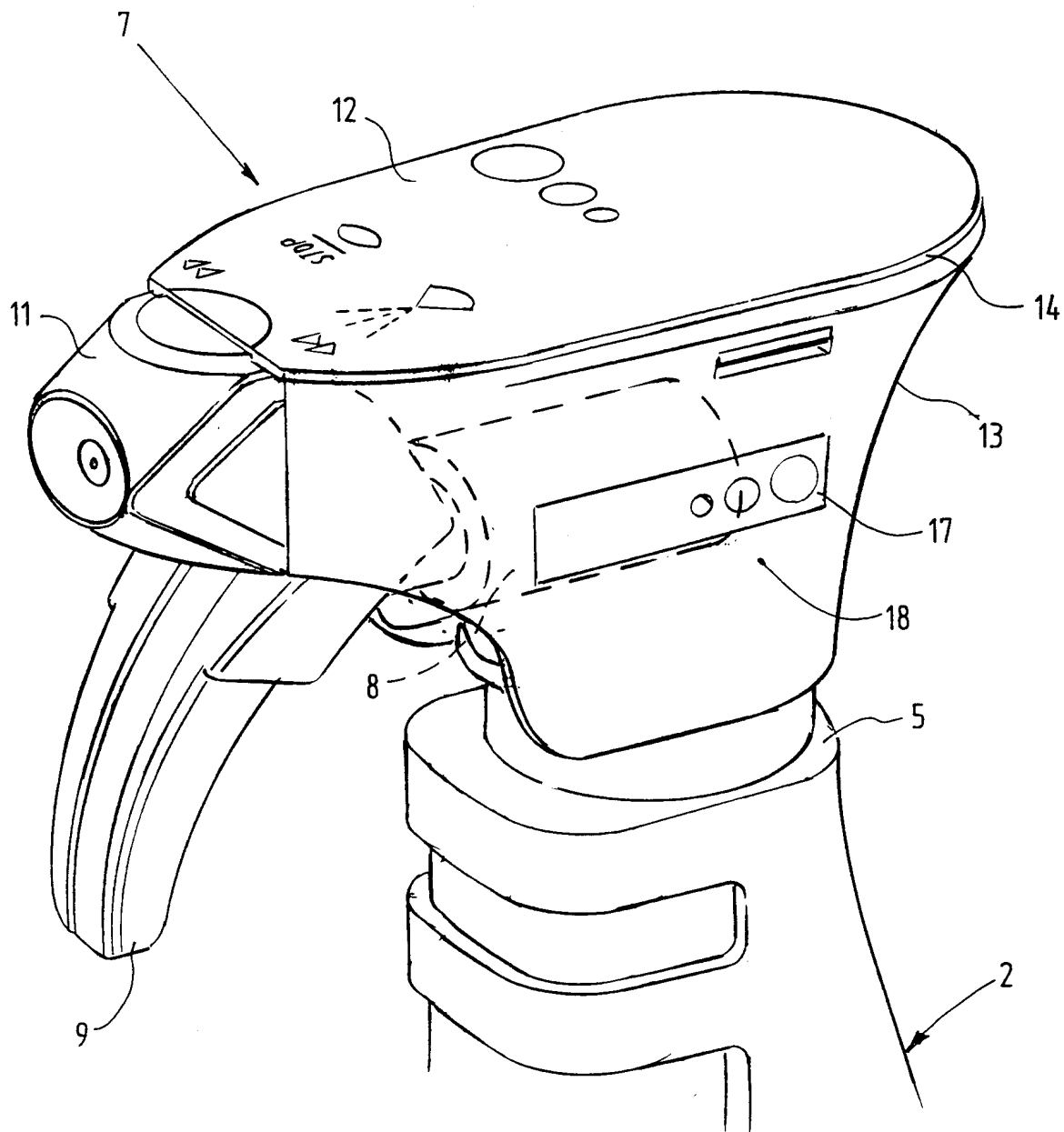


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FIG. 7



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FIG. 8

INTERNATIONAL SEARCH REPORT

International Application No

PCT/NL 00/00424

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 B65D47/34 B05B11/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B05B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|--|-----------------------|
| X | US 3 820 721 A (HELLENKAMP J) 28 June 1974 (1974-06-28) column 2, line 36 - line 49 --- | 1-6, 9-11 |
| X | DE 44 00 945 A (URSATEC VERPACKUNG GMBH) 20 July 1995 (1995-07-20) column 3, line 53 - line 59; figure 3 --- | 1, 3-5, 7-11 |
| X | US 5 366 121 A (FOSTER DONALD D ET AL) 22 November 1994 (1994-11-22) column 6, line 48 - line 57; figures --- | 1, 2, 4, 10, 11 |
| X | US 3 650 473 A (MALONE CARL E) 21 March 1972 (1972-03-21) column 5, line 20 - line 25; figures --- -/-- | 1, 3, 7-11 |

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents :

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/NL 00/00424

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

| Category ° | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|---|-----------------------|
| X | US 4 624 413 A (CORSETTE DOUGLAS F) 25 November 1986 (1986-11-25) column 3, line 41 - line 45; figures 3,4 --- | 1-4, 10, 11 |
| A | US 5 881 918 A (EICHLER BARBARA J) 16 March 1999 (1999-03-16) column 3, line 36 - line 42 --- | 4 |
| A | EP 0 481 090 A (SNOW BRAND MILK PROD CO LTD ;NIPPLA CO LTD (JP)) 22 April 1992 (1992-04-22) abstract ----- | 6 |

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/NL 00/00424

| Patent document cited in search report | | Publication date | Patent family member(s) | Publication date |
|---|---|---------------------|---|--|
| US 3820721 | A | 28-06-1974 | NONE | |
| DE 4400945 | A | 20-07-1995 | NONE | |
| US 5366121 | A | 22-11-1994 | AU 630210 B AU 5912390 A CA 2043444 A DE 4023401 A FR 2662669 A GB 2244522 A,B IT 1244826 B JP 6345114 A | 22-10-1992 05-12-1991 01-12-1991 05-12-1991 06-12-1991 04-12-1991 06-09-1994 20-12-1994 |
| US 3650473 | A | 21-03-1972 | BE 764173 A CA 941801 A DE 2112195 A ES 389215 A FR 2081938 A GB 1331842 A HK 16077 A IL 36259 A NL 7103043 A | 13-09-1971 12-02-1974 23-09-1971 01-05-1974 10-12-1971 26-09-1973 15-04-1977 29-06-1973 15-09-1971 |
| US 4624413 | A | 25-11-1986 | AU 573947 B AU 5250386 A BE 904095 A CA 1248923 A DE 3601612 A DK 31686 A FR 2576225 A GB 2170735 A,B GR 860150 A IE 57277 B IT 1207064 B JP 1999627 C JP 7002221 B JP 61174960 A KR 9006715 B LU 86257 A NL 8600107 A,B, | 23-06-1988 31-07-1986 15-05-1986 17-01-1989 24-07-1986 24-07-1986 25-07-1986 13-08-1986 21-05-1986 01-07-1992 17-05-1989 08-12-1995 18-01-1995 06-08-1986 20-09-1990 09-06-1986 18-08-1986 |
| US 5881918 | A | 16-03-1999 | NONE | |
| EP 0481090 | A | 22-04-1992 | JP 2868281 B JP 4014420 A DE 69123691 D DE 69123691 T WO 9117036 A US 5193711 A | 10-03-1999 20-01-1992 30-01-1997 10-07-1997 14-11-1991 16-03-1993 |

DERWENT-ACC-NO: 2001-071237

DERWENT-WEEK: 200121

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TITLE: Dispenser for dispensing various types and brands of products, has dispensing mechanism arranged on at least one outlet opening in container and carries at least one label displaying information

INVENTOR: HURKMANS P L W; MAAS W J J

PATENT-ASSIGNEE: AFA POLYTEK BV[AFAPN]

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PATENT-FAMILY:

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|----------------|-------------------|-----------------|
| WO 0076876 A1 | December 21, 2000 | EN |
| AU 200057152 A | January 2, 2001 | EN |

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BR BY CA CH CN CR CU CZ DE DK
DM DZ EE ES FI GB GD GE GH GM
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KR KZ LC LK LR LS LT LU LV MA
MD MG MK MN MW MX MZ NO NZ PL
PT RO RU SD SE SG SI SK SL TJ T
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ZW AT BE CH CY DE DK EA ES FI
FR GB GH GM GR IE IT KE LS LU
MC MW MZ NL OA PT SD SE SL SZ

TZ UG ZW

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|----------------|------------------------|--------------------|---------------------|
| WO2000076876A1 | N/A | 2000WO- NL00424 | June 16, 2000 |
| AU 200057152A | Based on | 2000AU- 057152 | June 16, 2000 |

INT-CL-CURRENT:

| TYPE | IPC DATE |
|-------------|--------------------|
| CIPS | B05B11/00 20060101 |

ABSTRACTED-PUB-NO: WO 0076876 A1**BASIC-ABSTRACT:**

NOVELTY - The dispenser includes a container (2) which holds a product to be dispensed. The container has a bottom part, a top part and sidewalls which interconnect the top and bottom parts. Outlet openings are formed in the container near the top part. A dispensing mechanism (7) is arranged on at least one outlet opening and carries at least one label displaying information (12).

DESCRIPTION - An INDEPENDENT CLAIM is also included for a dispensing mechanism for dispenser.

USE - For dispensing various types and brands of products.

ADVANTAGE - Improves the impact and visibility of the information on the dispensing mechanism.

DESCRIPTION OF DRAWING(S) - The figure shows the enlarged view of the dispensing mechanism of the dispenser.

Container (2)

Dispensing mechanism (7)

Label displaying information (12)

CHOSEN-DRAWING: Dwg.3/8

TITLE-TERMS: DISPENSE VARIOUS TYPE BRAND
PRODUCT MECHANISM ARRANGE ONE
OUTLET OPEN CONTAINER CARRY LABEL
DISPLAY INFORMATION

DERWENT-CLASS: P42 Q33

SECONDARY-ACC-NO:

Non-CPI Secondary Accession Numbers: 2001-053910